

UNITED STATES BANKRUPTCY COURT  
SOUTHERN DISTRICT OF NEW YORK

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In re:	:	Chapter 11
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DELPHI CORPORATION, <i>et al.</i> ,	:	Case No. 05-44481 (RDD)
	:	(Jointly Administered)
Debtors.	:	
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**EXPERT REPORT OF THOMAS A. KOCHAN  
IN OPPOSITION TO DEBTORS' MOTION FOR ORDER UNDER  
11 U.S.C. §1113(c) AUTHORIZING REJECTION OF COLLECTIVE  
BARGAINING AGREEMENTS AND UNDER 11 U.S.C. §1114(g)  
AUTHORIZING MODIFICATION OF RETIREE WELFARE BENEFITS**

A Path to Sustainable Recovery: Delphi, the UAW, and GM  
Thomas A. Kochan

I have been retained by the United Automobile Workers (UAW) to offer an analysis of what will be required for Delphi, the UAW, and General Motors (GM) to achieve a sustainable recovery of Delphi Corporation. This expert reports is being submitted in opposition to Delphi's Motion for Authority to Reject Collective Bargaining Agreements Under 11 U.S.C. Section 1113 and Modify Retiree Welfare Benefits Under 11 U.S.C. section 1114(g). I have personal knowledge of the facts set forth in this declaration and, if called as a witness, could and would testify to all facts in this document. I have reviewed the principal court filings of Delphi and the UAW in preparing this report.

I have not been asked to offer an opinion on what changes in labor costs or what operations should be closed or sold. My agreed upon task is to review the lessons learned from over twenty-five years of research and active involvement in labor-management relations in the auto industry, the airline industry, and other industries and organizations that have made efforts to modernize their manufacturing, service delivery and labor/employment relations systems.

My resume listing publications since 1980 is attached as an appendix to this report. In brief, I am the George M. Bunker Professor of Management at the MIT Sloan School of Management and hold a dual appointment as a Professor in MIT's Engineering Systems Division. I also am Co-Director of the MIT Institute for Work and Employment Research and the MIT Workplace Center. I teach courses in work and employment relations, organizational behavior, leadership and change in MIT's MBA, Leaders' for Manufacturing,<sup>1</sup> and Undergraduate Programs. I helped found the HR Network, a group of researchers from universities around the country engaged in studies of workplace innovations and their effects on firm performance, jobs, and workforce outcomes, an initiative funded by the Alfred P. Sloan Foundation. I've served as president of the International Industrial Relations Association and the Industrial Relations Research Association. Over the years I've worked as an unpaid and from time to time as a paid consultant to a variety of labor-management groups, labor unions, government agencies, and companies. I periodically serve as a facilitator, mediator and arbitrator in labor management relations, I was a member of the Commission on the Future of Worker Management Relations from 1992-95.

I have served as an expert witness for the plaintiff in a deposition regarding an employee disability lawsuit in 2003 (Sharon White vs. Raytheon Corporation). Currently I am serving as an expert witness for the plaintiffs in a class action lawsuit in Massachusetts brought against the Wal-Mart Corporation alleging wage and hour violations (Salvas vs. Wal-Mart Stores).

My fee for this service is \$400 per hour.

### **The Issue**

The UAW, Delphi, and GM are at a crossroad. Decisions made now will determine whether or not Delphi and GM will survive and rebound from their current financial crises and

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<sup>1</sup> General Motors is one of the corporate partners in the MIT Leaders for Manufacturing Program.

whether UAW members and other employees of these two companies will have good jobs, poor jobs, or no jobs at all.

### **Lessons from Prior Experience in the Auto Industry**

A similar crisis faced GM and the UAW in the early 1980s in Fremont, California when that GM plant was closed and then reopened as a joint venture between GM and Toyota. The Fremont plant had the worst labor relations (measured by grievance and discipline rates) and among the worst productivity and quality of all GM plants.<sup>2</sup> Under Toyota's management, production system, and labor-management relationship, New United Motors Manufacturing, Inc. (NUMMI) became the most productive and highest quality plant in North America and among the top performing plants in the world.<sup>3</sup>

NUMMI and the UAW have been successful in maintaining their high levels of productivity, quality, and labor management relations for more than two decades. A detailed study of NUMMI and other Japanese transplants conducted by a leading Japanese labor economist Haruo Shimada and MIT PhD student John Paul MacDuffie showed how NUMMI achieved these results: they took an integrated approach to their technology, manufacturing, human resource, labor relations, and work organization strategies and processes and rebuilt the trust and commitment of their workforce.<sup>4</sup> MacDuffie then went on to document the generalizability of this transformed manufacturing and human resource model as a predictor of manufacturing performance in a world-wide sample of auto plants.<sup>5</sup>

The same relationship between positive labor relations and economic performance in auto assembly plants and a mix of supplier plants was documented in two studies I conducted in the 1980s with Professor Harry Katz, now the Dean of the School of Industrial and Labor Relations at Cornell University. In both studies we showed that those plants that had fallen into what we referred to as a high conflict/low trust cycle, i.e., one that had low employee morale as measured by relations with management in plant surveys, high grievance rates, high discipline rates, and lengthy local contract negotiations had significantly lower rates of productivity and product quality. The point was clear: Only by improving these underlying features of the labor relations system could plants expect to achieve high levels of performance.<sup>6</sup>

The lessons from NUMMI and from scattered experimentation with various forms of employee participation in the early 1980s led GM and the UAW to engage in a joint study of

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<sup>2</sup> Thomas Kochan, "On the Human Side of Technology," *ICL Technical Journal*, November, 1988, 391-400.

<sup>3</sup> John Krafcik "Triumph of the Lean Production System," *Sloan Management Review*, vol. 30, no. 1, 1988, 41-52. Two other comprehensive studies of NUMMI are: Paul Adler, "Time and Motion Regained," *Harvard Business Review*, January-February 1993, 97-108 and Welford Wilms, *Restoring Prosperity: How Workers and Managers are Forging a New Culture of Cooperation*, New York: Times Business, 1996.

<sup>4</sup> Haruo Shimada and John Paul MacDuffie, "Industrial Relations and Humanware," MIT Sloan School of Management, 1987.

<sup>5</sup> John Paul MacDuffie, "Human Resource Bundles and Manufacturing Performance: Organizational Logic and Flexible Production Systems in the World Auto Industry," *Industrial and Labor Relations Review*, vol. 48, 1995, 197-221.

<sup>6</sup> Harry Katz, Thomas Kochan, and Kenneth Gobielle, "Industrial Relations Performance, Economic Performance, and the Quality of Working Life Efforts," *Industrial and Labor Relations Review*, vol. 37, 1983, 13-37; Harry Katz, Thomas Kochan and Mark Weber, "Assessing the Effects of Industrial Relations and Quality of Working Life Efforts on Organizational Effectiveness," *Academy of Management Journal*, vol. 28, 1985, 509-27; Harry Katz, Thomas Kochan, and Jeffrey Keefe, "Industrial Relations and Productivity in the U.S. Automobile Industry," *Brookings Papers on Economic Activity*, vol. 3, 1987, 685-715.

how to create and govern an organization capable of making small cars competitively in the U.S. At that time GM estimated it had approximately a \$1,500 cost disadvantage relative to importing cars from lower cost countries in Asia and determined it could not make up this cost differential with its traditional management or labor relations system and practices. The committee (called the Committee of 99) benchmarked practices all over the world, consulted with academics and other experts inside and outside the auto industry and reached consensus on what they called a "new kind of company and new kind of car."<sup>7</sup> The company they created was called the Saturn Corporation and was set up as a wholly owned but separate division of GM. Saturn's design called for participation by workers and UAW leaders from the shop floor to the strategic levels of decision making in the company. It also incorporated new approaches to manufacturing, marketing, sales, and service. The integrated system introduced into Saturn allowed the company to introduce a "no haggle" sales process and emphasized the joint, cooperative and high involvement relationship among workers, the UAW, and Saturn management in its marketing/advertising efforts.

Saturn was very positively received in its early years by the marketplace, earning top ranking for the quality of its vehicles, sales, and service experiences. Unfortunately, Saturn's early successes were not sustained. Shortly after the decision to launch Saturn was made GM began experiencing serious financial difficulties and cut back on the planned investment in Saturn. Then a series of internal debates over the future of Saturn and its participatory design developed after its initial champions within GM and the UAW retired. Decisions over new products were delayed for years. For these and other reasons, Saturn's performance slowly deteriorated to the point that in recent years GM and the UAW had to negotiate major revisions in the Saturn model and integrate it back into the UAW-GM national contract and product platform-sharing arrangements.

The positive and negative lessons from Saturn should not be lost. It was a state of the art, creative concept when first conceived in the mid 1980s. It did not adapt and change as conditions required and there were mixed views within both GM and UAW leadership about the viability of the Saturn model of organization and labor management relations. Saturn managers and local union leaders got too isolated from their GM and UAW parents/colleagues.

But the key lesson of Saturn for the current Delphi-UAW-GM situation is that where both parties accept that there is a cost disadvantage that needs to be closed they can work together to design a new state-of-the-art approach to manufacturing and marketing products capable of capturing the enthusiasm and support of American car buyers. By working together at both the workplace level and at the strategic level of business decision-making, new breakthroughs in marketing, production, sales, and service were achieved then and can be achieved again now.

Lessons from Saturn's demise can also be learned: Innovations cannot be done in isolation. All the key parties who control the resources needed to sustain an innovation over time need to have a broadly shared vision of what is needed to be competitive and to produce and sustain good jobs with high levels of employee commitment, skill, and pride in their work and need to constantly adjust the initial concept/design as market, technology, or other changes occur.

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<sup>7</sup> The summary of the Saturn experience presented here is based on our ten year study of the company. See, Saul Rubinstein and Thomas Kochan, *Learning from Saturn*. Ithaca, NY: Cornell University/ILR Press, 2001.

## **Lessons from Other Manufacturing Industries**

The auto industry was not alone in introducing new ways of working in the 1980s and early 1990s. Other industries were also changing their manufacturing and labor/employment relations systems. Indeed, a wide range of research has been carried out in different industries to assess the effects of these innovations, most of which involve different combinations of teamwork, employee participation in problem solving, investments in training, and related labor relations and human resource innovations—what have come to be known as “knowledge-based” or “high performance” work systems. These systems have been shown to be positively associated with productivity, quality, and other measures of economic performance.<sup>8</sup>

## **Lessons from the Airline Industry**

The airline industry provides a stark lesson for the challenges now facing Delphi, the UAW, and GM. Our group at MIT has studied the airline industry as part of the Sloan Foundation funded Global Airline Industry Project. We have done historical case studies of each of the major airlines,<sup>9</sup> we have done econometric analyses of the relationships between labor relations and financial performance of the major airlines from the early years of deregulation through 2001,<sup>10</sup> we have followed carefully the responses of the major carriers and their unions since the September 11, 2001 tragedy, we have facilitated discussions among labor, industry, and government leaders that led to a consensus white paper over how to improve airline negotiation and dispute resolution processes,<sup>11</sup> and we have worked collaboratively with labor, management, and government leaders to create an Airline Industry Council and discussion forum to share research results and experiences on how to build a sustainable recovery strategy for firms, workers, and the overall industry. Based on this work we have reached the following conclusions:

“The nation’s airline industry is in the throes of an historic crisis and restructuring process. To date, most, but not all, of the focus has been on reducing labor costs to reflect fundamental changes in market conditions, particularly among the nation’s largest network carriers. While reducing labor costs is necessary, it is not a sufficient strategy for firm or industry recovery. Both research and experience tell us a sustainable recovery at the firm and industry level will also require:

- Workplace cultures that promote trust and employment practices that promote high levels of coordination and productivity among employees.
- Negotiation and conflict resolution processes that achieve labor agreements in a timely manner without disruptions.

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<sup>8</sup> Ichniowski, Casey, Thomas Kochan, David Levine, Craig Olsen, and George Strauss, “What Works at Work,” *Industrial Relations*, vol 35, 1996, 299-333.

<sup>9</sup> See for example, Jody Hoffer Gittel, *The Southwest Airlines Way*. New York: McGraw Hill, 2003.

<sup>10</sup> Jody Hoffer Gittel, Andrew von Nordenflycht, and Thomas Kochan, “Mutual Gains or Zero Sum: Labor Relations in the Airline Industry,” *Industrial and Labor Relations Review*, January, 2004, 163-180.

<sup>11</sup> *Options for Improving Negotiations and Dispute Resolution: A Report of the Working Group on Airline Labor Relations*, March, 2004

- Compensation plans that share the sacrifices and gains achieved in a fair fashion among employee and management groups throughout the organization.
- Sustainable business models and strategies that can both generate and sustain profits and jobs with wages, benefits, and career opportunities needed to attract and retain a high quality workforce.
- Employment models and organizational strategies that manage effectively the on-going consolidation and restructuring processes as firms merge and/or work is contracted out and that reduce the barriers to and costs of moving across firms.”<sup>12</sup>

## Conclusions

I have not been asked nor do I have the information required to reach a judgment on whether or how much of a labor cost reduction is necessary and/or what product lines and/or facilities need to be sold or restructured to reverse the losses experienced at Delphi and to put the company and its workforce on path to a sustainable recovery. Instead, what I can say conclusively based on over twenty five years of research and active involvement in management and labor relations in autos, airlines, and other industries is that no sustainable recovery will be possible unless the basic lessons learned from the cumulative experience and evidence summarized in this memo are taken into account. Stated simply:

- Labor cost reductions may be a necessary condition but they alone will not be sufficient for recovery.
- A sustainable recovery will require labor and management to work together to identify, based on open joint exploration, the state-of-the-art manufacturing, work system design, and labor relations practices that it will take to be successful in the auto industry today and in the future. That is the lesson of Saturn, the airline industry, NUMMI, and the experiences of innovations introduced into manufacturing and service industries over the past two decades.
- These innovations cannot be imposed by management alone, by the court, or by any other outside party. They require mutual exploration, negotiation, and commitment that can only come from the parties themselves, informed by and open to evidence and ideas from others in and outside the industry.



Thomas A. Kochan

April 27, 2006

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<sup>12</sup> Thomas Kochan, Jody Hoffer Gittel, Robert McKersie, and Andrew vonNordenflycht, A Recovery Path for the Nation's Airline Industry: A Statement from the MIT Global Airline Industry Program to the Airline Industry Council. January, 2006.

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**EDUCATION**

Ph.D., Industrial Relations, University of Wisconsin, 1973

M.S., Industrial Relations, University of Wisconsin, 1971

B.B.A., University of Wisconsin, 1969

**EMPLOYMENT HISTORY**

1989 to present:	George M. Bunker Professor of Work and Employment Research, Sloan School of Management, MIT.
1980 to present:	Co-Director, MIT Institute for Work and Employment Research.
2001 to present:	Co-Director, MIT Workplace Center.
2001:	Montague Burton Distinguished Visiting Professor, Cardiff University.
1995:	Centennial Visiting Professor, The London School of Economics.
1992:	Visiting Professor, Graduate School of Business, Stanford University.
1988 to 1992:	Leaders in Manufacturing Professor, Sloan School of Management, Massachusetts Institute of Technology.
1988 to 1991:	Area Head, Behavioral and Policy Sciences, Sloan School of Management.
1980-1988:	Professor of Industrial Relations, Sloan School of Management, Massachusetts Institute of Technology.
1979-1980:	On leave to the U.S. Department of Labor, Office of the Assistant Secretary for Policy, Evaluation, and Research.

1977-1980: Associate Professor, School of Industrial and Labor Relations, Cornell University.

1973-1977: Assistant Professor, School of Industrial and Labor Relations, Cornell University.



## **HONORS AND AWARDS**

- 2002           Autobiography included in Managerial Laureates, Volume 6
- 2001           Listed in Who's Who in America
- 2000           Listed in Blackwell's Dictionary of Management Scholars
- 1999           Awarded "Doctor Honoris Cause" by the Universidad de San Martin de  
Porres de Lima.
- 1999           President of the Industrial Relations Research Association.
- 1998           Recipient of the Boston Labor Guild Cushing-Gavin Award.
- 1997           Elected Fellow of the National Academy of Human Resources.
- 1996           Appointed Co-Chair of National Research Council Committee on Work  
and Occupational Analysis, 1996-98.
- 1996           Appointed Co-Chair of Society for Professionals in Dispute Resolution  
Task Force on ADR in the Workplace, 1996-98.
- 1996           Recipient of the Heneman Career Achievement Award, Academy of  
Management, Human Resources Division.
- 1995           Named Co-chair, 50th Anniversary Committee of the Industrial Relations  
Research Association.
- 1995           Named Centennial Visiting Professor, The London School of Economics.
- 1992-1995      President, International Industrial Relations Research Association.
- 1993           Appointed to Commission for the Future of Worker-Management  
Relations.
- 1991           Donald Wood Visiting Scholar, Queens University.
- 1989           Elected President of the International Industrial Relations Association for  
the 1992-1995 term.
- 1989           Named George M. Bunker Chaired Professor of Management, MIT.
- 1988           Named to a Chaired Professorship in MIT's Leaders in Manufacturing  
Program.

- 1987 Recipient of the George Terry Scholarly Book Award from the Academy of Management for The Transformation of American Industrial Relations.
- 1984 Recipient of the First Bill Abner Award for Research on Public Sector Labor Relations from the Society of Professionals in Dispute Resolution.
- 1974 Recipient of the S. Rains Wallace Award for best Ph.D. dissertation from Division 14 of the American Psychological Association.

## **BOOKS AND MONOGRAPHS**

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Working in America: Labor Market Institutions for the New Century. Cambridge, MA: MIT Press, 2001. (With Paul Osterman, Richard Locke and Michael Piore).

Integrating Work and Family Life: A Holistic Approach, (with Lotte Bailyn and Robert Drago). MIT Sloan School of Management, 2001.

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Managing for the Future: Organizational Behavior and Processes, with Deborah Ancona, Maureen Scully, John Van Maanen, and D. Eleanor Westney, Cincinnati: South-Western College Publishing, 1996. Second edition, 1999; Third edition, 2004.

Employment Relations in a Changing World Economy, edited with Richard Locke and Michael Piore, Cambridge: The MIT Press, 1995.

Human Resource Management in Asian Economies, edited with Anil Verma and Russell Lansbury, London: Routledge, 1995.

The Mutual Gains Enterprise, with Paul Osterman, Boston: Harvard Business School Press, 1994.

An Introduction to Collective Bargaining and Industrial Relations, with Harry C. Katz, New York: McGraw Hill, 1992. Second Edition, 2000, Third edition, 2003.

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The Transformation of American Industrial Relations, with Harry C. Katz and Robert B. McKersie, New York: Basic Books, 1986. Second edition, 1994.

Human Resource Management and Industrial Relations: Text, Readings and Cases, with Thomas A. Barocci, Boston: Little Brown, 1985.

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Collective Bargaining and Industrial Relations: From Theory to Policy and Practice, with Harry C. Katz, Homewood: Irwin, 1980. Second edition, 1987. Third Edition, 2002.

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"Computer-Aided Monitoring: Its Influence on Employee Job Satisfaction and Turnover," with John Chalykoff, *Personnel Psychology*, vol. 42, 1989, 807-34.

"Future Directions for American Labor and Human Resources Policy," *Relations Industrielles*, vol. with Robert B. McKersie, 44, 1989, 224-44.

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